


AGENCY USE ONLY				
PERMIT NO.:	Date Rec'd.:	Amount Rec'd.:	Check No.:	Rec'd By:
MTG010135	11/1/13	0		
 <div style="display: inline-block; vertical-align: middle; text-align: center;"> Montana Department of  <b>ENVIRONMENTAL QUALITY</b> </div>				
<b>WATER PROTECTION BUREAU</b>				
<b>FORM NOI</b>	<b>Notice of Intent (NOI) for Montana Pollution Discharge Elimination System Application for New and Existing Concentrated Animal Feeding Operations</b>			
<p>The Application form is to be completed by the owner or operator of a Concentrated Animal Feeding Operation (CAFO) or Aquatic Animal Production Facility. Please read the attached instructions before completing this form. You must print or type legibly; forms that are not legible or are not complete will be returned. You must maintain a copy of the completed application form for your records.</p>				
<b>Section A - Application Status (Check one):</b>				
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <input type="checkbox"/> New  <input type="checkbox"/> Resubmitted  <input checked="" type="checkbox"/> Renewal  <input type="checkbox"/> Modification </div> <div style="width: 50%;"> No prior application submitted for this site.  Permit Number: MTG _____  Permit Number: MTG <u>0 1 0 1 3 5</u>  Permit Number: MTG _____ </div> </div>				
<div style="border: 1px solid black; padding: 5px; transform: rotate(-5deg);"> <b>RECEIVED</b>  NOV 01 2013  DEQ/WPB  PERMITTING &amp; COMPLIANCE DIV. </div>				
<b>Section B - Facility or Site Information (See instruction sheet.):</b>				
Site Name <u>Weschenfelder Feedlot Inc.</u>				
Site Location <u>Site # 1</u>				
Nearest City or Town <u>Park City</u> County <u>Stillwater</u> <span style="float: right; font-family: cursive;">11/4/13</span>				
Latitude <u>N 45.38</u> Longitude <u>W 108.55</u>				
Date Facility began operation? <u>1952</u>				
Is this facility or site located on Indian Lands? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
<b>Section C - Applicant (Owner/Operator) Information:</b>				
Owner or Operator Name <u>Henry and Dan Weschenfelder</u>				
Mailing Address <u>10626 C.A. Road</u>				
City, State, and Zip Code <u>Shepherd MT 59079</u>				
Phone Number <u>406-373-5741</u>				
Is the person listed above the owner? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
Status of Applicant (Check one) <input type="checkbox"/> Federal <input type="checkbox"/> State <input checked="" type="checkbox"/> Private <input type="checkbox"/> Public <input type="checkbox"/> Other (specify) _____				

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**Section D - Existing or Pending Permits, Certifications, or Approvals:** ☐ None

☒ MPDES MTG010135 ☐ RCRA \_\_\_\_\_  
☐ PSD (Air Emissions) \_\_\_\_\_ ☐ Other \_\_\_\_\_  
☐ 404 Permit (dredge & fill) \_\_\_\_\_ ☐ Other \_\_\_\_\_

**Section E - Standard Industrial Classification (SIC) Codes:**

Provide at least one SIC code which best reflects the activity of project described in Section H.

Code	A. Primary	Code	B. Second
1	211	2	
Code	C. Third	Code	D. Fourth
3		3	

**Section F - Facility or Site Contact Person/Position:**

Name and Title, or Position Title Dan Weschenfelder Owner/Manager  
Mailing Address 10626 C.A. Road  
City, State, and Zip Code Shepherd MT 59079  
Phone Number 406-373-5741

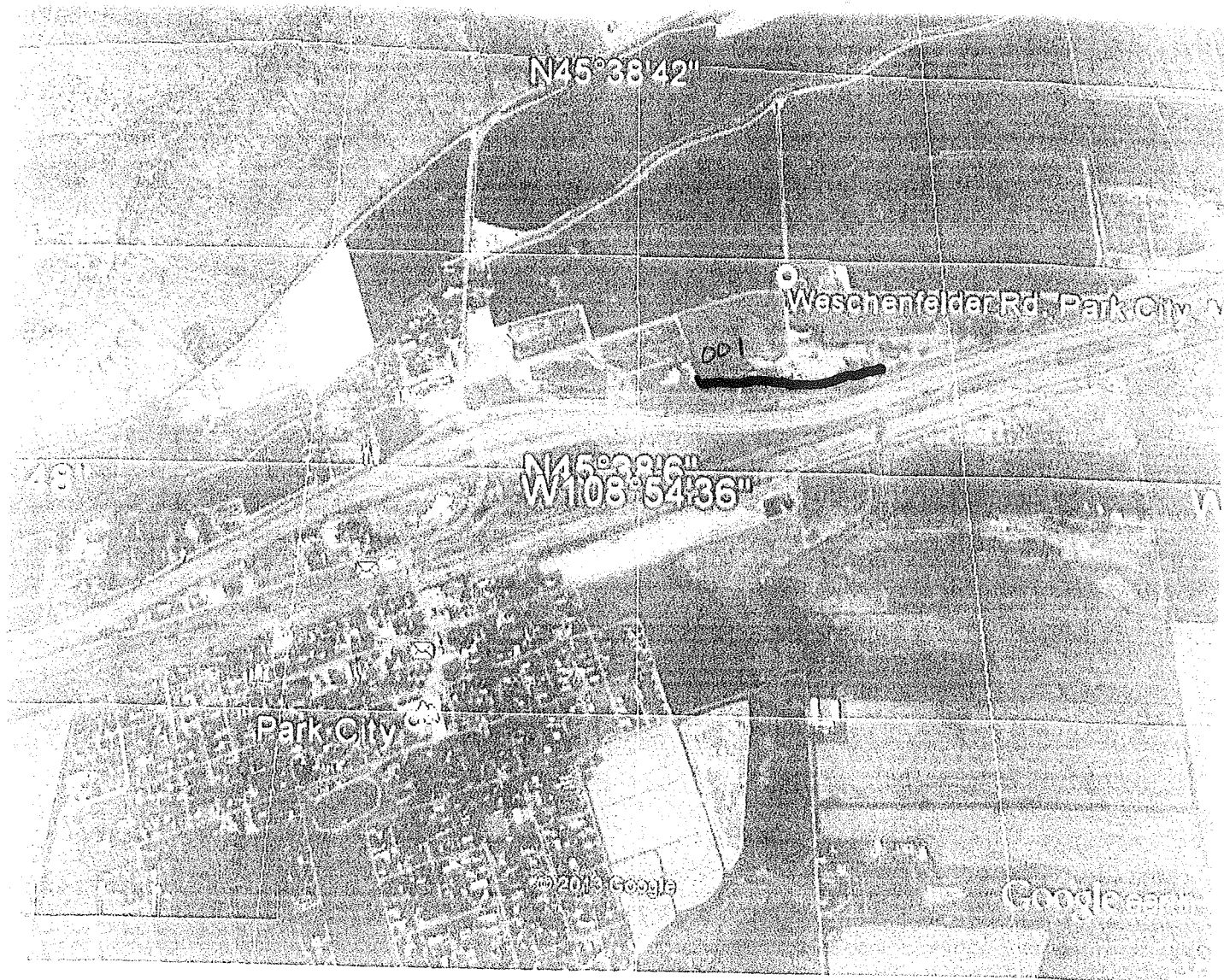
**Section G - Receiving Surface Waters(s):** See Attachment

Outfall/Discharge Locations: For each outfall, List latitude and longitude to the nearest second and the name of the receiving waters

Outfall Number	Latitude	Longitude	Receiving Surface Waters
001	N 45.63585	w 108.90889	Italian Ditch
002			
003			
004			
005			

Map: Attach a topographic map extending one mile beyond the property boundaries or the site activity identified in Section B depicting the facility or activity boundaries, major drainage patterns, and the receiving surface waters, stated above. Also identify the specific location of the production area, and land application area(s).

Is the receiving water on the 303(d) list for nutrients (nitrogen and/or phosphorus) ☐ Yes ☒ No



feet 4000  
km 1

001 - N 45.63585 W 108.90889

# Montana Topographic Map Finder

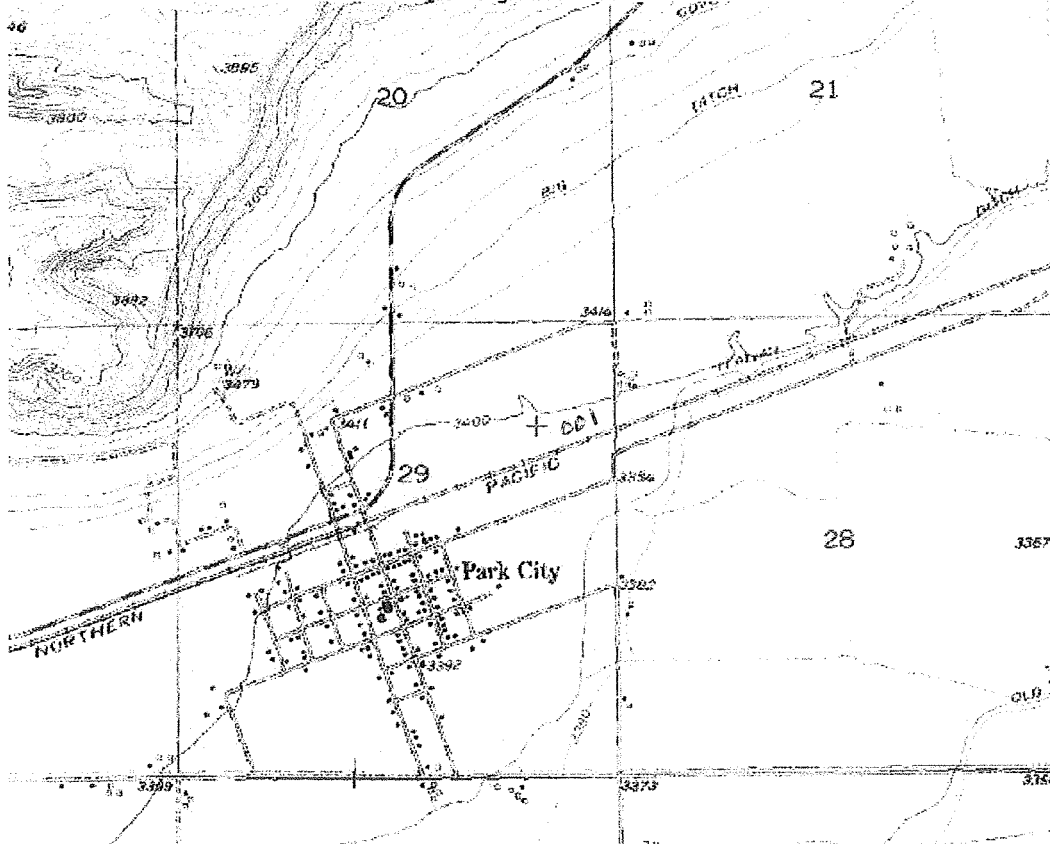
The map is 2.35 miles wide.

Choose Image Type

Topographic Map

Refresh

Quadrangle Date = 1956



Map Size: ☐ Extra Large ☒ Large ☐ Small Refresh

[Click Here to view other map data for this area.](#)

Select a Map Control, then click on the map

Map Controls

☐ ZoomIn

Zoom Factor

☐ ZoomOut

3

☒ New Center

State View

Map Center Coordinates  
at Red +

Datum: NAD83 ☒ NAD27 ☐

Decimal Degrees  
Lat 45.63585 Long -108.90889

State Plane  
E 646073 N 154193

UTM Zone 12  
E 662978 N 5055716

US National Grid  
12T XR 62978 55716

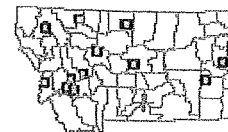
TRS T2S R23E S29

Hydrologic Unit 10070004  
Upper Yellowstone River-Big Lake Basin

Download 24K quadrangle: [Park City](#)

Download 100K quadrangle: [Billings](#)

Click the small map to move the main map center.



Green squares show areas where 2004 hi-resolution color photos are available.

[Legend](#) | [Help](#)

Search Tools

## Section H – Concentration Animal Feeding Operation Characteristics

### Waste Production, Storage and Disposal

Animal type	Number in Open Confinement	Number Housed Under Roof
<input type="checkbox"/> Mature Dairy Cows		
<input type="checkbox"/> Dairy Heifers		
<input type="checkbox"/> Veal Calves		
<input checked="" type="checkbox"/> Cattle (not dairy or veal)	700	0
<input type="checkbox"/> Swine (55 lbs or over)		
<input type="checkbox"/> Swine (55 lbs or under)		
<input checked="" type="checkbox"/> Horses		
<input type="checkbox"/> Sheep or Lambs		
<input type="checkbox"/> Turkeys		
<input type="checkbox"/> Chickens (broilers)		
<input type="checkbox"/> Chickens (layers)		
<input type="checkbox"/> Ducks		
<input type="checkbox"/> Other (Specify: _____)		
<input type="checkbox"/> Other (Specify: _____)		
<input type="checkbox"/> Other (Specify: _____)		

### Manure, Litter and/or Wastewater Production and Use.

How much manure, litter, and process wastewater is generated annually by the facility?

Solid (tons): 1145 tons Liquid/Slurry (gallons): 0

If land applied, how many acres of land under control of the permit applicant are available to apply the manure, litter, or process wastewater generated from the facility? (Note: Do not include setback distances in available acreage)

364.26 Acres

How much manure, litter, and process wastewater is transferred to other persons per year? (estimated) Solid

(tons): 0 tons Liquid/Slurry (gallons): 0

Were the containment structures built after February 2006? NO

- ☐ Do the waste containment structures have 10 feet of separation between the pond bottom and any bedrock formations?
- ☐ Do the waste containment structures have 4 feet of separation from the pond bottom and any ground water?
- ☐ Were any of the waste containment structures built within 500 feet of any existing well?

Type of Containment/Storage	Total Capacity	Units (gallons or tons)	Days of Storage
<input type="checkbox"/> Anaerobic Lagoon			
<input checked="" type="checkbox"/> Storage Pond #1 <i>Settling</i>	2,164,240	Gallons	180
<input type="checkbox"/> Storage Pond #2 <i>Holding</i>	1,316,480	Gallons	180
<input type="checkbox"/> Storage Pond #3			
<input type="checkbox"/> Storage Pond #4			
<input type="checkbox"/> Storage Pond #5			
<input type="checkbox"/> Above Ground Storage Tank			
<input type="checkbox"/> Below Ground Storage Tank #1			
<input type="checkbox"/> Below Ground Storage Tank #2			
<input type="checkbox"/> Underfloor Pits			
<input type="checkbox"/> Roofed Storage Shed			
<input type="checkbox"/> Concrete Pad			
<input type="checkbox"/> Impervious Soil Pad			
<input type="checkbox"/> Other (Specify: _____)			
<input type="checkbox"/> Other (Specify: _____)			

### Physical Data for CAFO

#### Nutrient Management Plan

All Concentrated Animal Feeding Operations seeking permit coverage after July 31, 2007 are required to complete and implement a Nutrient Management (NMP). The NMP must be submitted to the Department using the form provided by the Department (Form NMP). Check the box below that applies and provide the required information. The NMP must be developed in accordance with ARM 17.30.1334 and implemented upon the effective date of permit coverage. (Check One)

- ☒ Does the facility have an NMP?  
 Date NMP was developed: 01/30/2009  
 Date NMP was last modified: \_\_\_\_\_
- ☐ NMP has not been prepared; provide detailed explanation below

### Section I – Supplemental Information

**Section J - CERTIFICATION****Permittee Information:**

This Form NMP must be completed, signed, and certified as follows:

- For a corporation, by a principal officer of at least the level of vice president;
- For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
- For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official.

**All Permittees Must Complete the Following Certification:**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information; including the possibility of fine and imprisonment for knowing violations. [75-5-633, MCA]

**A. Name (Type or Print)**

Dan Weschenfelder

**B. Title (Type or Print)**

Owner/Manager

**C. Phone No.**

406-698-8502

**D. Signature**

*Dan Weschenfelder*

**E. Date Signed**

10-30-13

*The Department will not process this form until all of the requested information is supplied, and the appropriate fees are paid. Return this form (NOI) and the applicable fee to:*

Department of Environmental Quality  
Water Protection Bureau  
PO Box 200901  
Helena, MT 59620-0901  
(406) 444-3080

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PERMITTING & COMPLIANCE DIV.

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MTG010135

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J.S.



Montana Department of  
**ENVIRONMENTAL QUALITY**  
WATER PROTECTION BUREAU

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PERMIT DEQ/WPB  
& COMPLIANCE DIVFORM  
NMP

## Nutrient Management Plan

**READ THIS BEFORE COMPLETING FORM:** Before completing this form (Form NMP), Concentrated Animal Feeding Operation (CAFO) operators need to read the General Permit, particularly Part IV.A. CAFO operators also need to read the "Instructions For filling out Form NMP," found at the back of this form. Form NMP is intended to help CAFO operators develop a site-specific Nutrient Management Plan, in compliance with Part IV.A of the General Permit and all applicable State rules and statutes. Your Nutrient Management Plan must be maintained at the site as required in Part III of the General Permit. Sections B and C on your Form NMP must state the information exactly the same way as it was stated on the most recently submitted version of your NOI-CAFO. Attach additional pages as necessary, indicating the corresponding section number on this NMP form. The 2013 General Permit, current fee schedule, and related forms are available from the Water Protection Bureau at (406) 444-3080 or <http://www.deq.mt.gov/wqinfo/MPDES/CAFO.asp>

## Section A – NMP Status:

- ☐ New No prior NMP submitted for this site.
- ☒ Resubmitted Previous NMP found incomplete.
- ☐ Modification Change or update to existing NMP.
- ☐ New 2013 New 2013 version of NMP.

## Section B – Facility Information:

Facility Name Weschenfelder Feedlot Inc.Facility Location Site 1Nearest City of Town Park City County Stillwater

## Section C – Applicant (Owner/Operator Information):

Owner or Operator Name Henry and Dan WeschenfelderMailing Address 10626 C.A. RoadCity, State, and Zip code Shepherd MT 59079Facility Phone Number 406-373-5741Email dcrumham@aol.com

12/10/13

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**Section D – NMP Minimum Elements:****1. Livestock Statistics**

Animal Type and number of animals	# of Days on Site (per year)	Annual Manure Production (tons, cu. yds. or gal
1. 700 beef cattle 500-750 lbs	100	1145 tons
2.		
3.		
4.		
5.		
6.		
7.		
8.		

**Method used for estimating annual manure production:**

Based on MSU extension office table 2-1

The calves in this lot are all limit fed so waste production is much less that tables indicate.

**2. Manure Handling****a. Describe Manure handling at the facility:**

Wet manure is pushed up into piles in the middle of each pen from Dec 1 to April 30 as needed. During hot summer months, May 1 to September 30th, the wet manure piles are spread out over the pens for dust control. It is then re-piled into dry piles and hauled out of pens to be spread in the fields. This method reduces the amount of tons to be hauled out by approximately 75%.

**b. Frequency of Manure Removal from confinement areas:**

between July 15th to Dec. 1st after crops are harvested off of the fields.

c. Is this manure temporarily stored in any location other than the confinement area? ☐ Yes ☒ No  
If so then how and where?

d. Is manure stored on impervious surface? ☐ Yes ☒ No  
If yes, describe type and characteristics of this surface:

3. Waste Control Structures					
Waste Control Structures (name/type)	Length (ft.)	Width (ft.)	Depth (ft.)	Volume (cubic ft. or gallons)	Number of days of storage
1. Settling pond	360	200	4	2164240 ga	180
2. Holding pond	220	200	4	1316480 ga	180
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

What is the 24 hr. 25 yr. storm event at this facility 2 3/4"

Production area: 15 acres. Type of lot (dirt or paved): dirt

Area contributing drainage from outside CAFO that enters confinement areas and waste storage, conveyance, or treatment structures: 0 acres.

What is the annual precipitation during the critical storage period 3-5 inches

How much freeboard do the pond(s) have 5 feet

#### 4. Disposal of Dead Animals.

Describe how dead animals are disposed of at this facility:

Deads are removed from pens as soon as possible. Baker Commodities rendering company picks up the deads once a week. Cattle that the rendering truck does not pick up are placed under manure piles to decompose.

## **5. Clean Water Diversion Practices**

**Describe how clean water is diverted from production area:**

Ditches, built up roadways, 2' to 3' berms

## **6. Prohibiting Animals and Wastes from Contact with State Waters**

**Describe how animals and wastes are prohibited from direct contact with state waters:**

Animals: wood and barbed wire fences

Wastes: Lagoons, 30" and wider vegetative strips, built up roadways, ditches and berms.

Yellowstone river is 4 miles away from feedlot facility.

**Describe how Chemicals and other contaminants are handled on-site:**

Chemicals are ordered on an as needed basis and then applied immediately. No chemicals are stored on the facility site.

## **7. Best Management Practice (BMPS)**

**Describe in detail all temporary, permanent and structural BMPS which will be used to control runoff of pollutants from facility's production area. Indicate the location of these measures. If BMPS are not installed include a schedule for implementation of each of these measures. Examples of BMP measures could include but are not limited to: constructing ditches, terraces,, and waterways above and open lot to divert clean water run on; installing gutters, downspouts and buried conduits to divert roof drainage; providing more roofed area: decreasing open lot surface area; repairing of adjusting water systems to minimize water wastage; using practical amounts of water for cooling purposes; recycling water if practical and applicable.**

**Production Area BMP's**

Clean water diversions were described in section D5 and are currently in use

Ditches, built up roadways and 2 - 3' berms.

**Describe in detail all temporary, permanent and structural Best Management Practices (BMPs) which will be used to control runoff of pollutants from facility's land production area. Indicate the location of these practices. If not already in use, include a schedule for implementation of each of these measures. Attached details and specifications may be used to supplement this description. Examples of BMP measures could include but are not limited to: maintaining setbacks from surface waters for manure applications; managing irrigation practices to prevent ponding of wastewater on land application sites;**

**never spray irrigating waste on to frozen ground: consulting with the Department prior to applying any liquid waste to frozen or snow-covered ground; applying wastes at agronomic rates.**

**Land Application BMP's**

**Buffers** ☒ Yes ☐ No

**Constructed Wetlands** ☐ Yes ☒ No

**Infiltration Field** ☐ Yes ☒ No

**Set backs** ☒ Yes ☐ No

**Conservation Tillage** ☒ Yes ☐ No

**Grass Filter** ☐ Yes ☒ No

**Residue Management** ☐ Yes ☒ No

**Terrace** ☐ Yes ☒ No

**Other examples**

Frequency of application of manure is based on annual soil samples, manure tests, crop yield goals and other seasonal variables.

**8. Implementation, Operation, Maintenance and Record Keeping – Guidance**

The permittee is required to develop guidance addressing implementation of NMP, proper operation and maintenance of the facility, and record keeping as described in Part 2 of the permit.

Has a guidance document been developed for the facility? ☒ Yes ☐ No

**Certify the document address the following requirements:**

**Implementation of the NMP:** ☒ Yes ☐ No

**Facility operation and maintenance:** ☒ Yes ☐ No

**Record keeping and reporting** ☒ Yes ☐ No

**Sample collection and analysis:** ☒ Yes ☐ No

**Manure transfer** ☒ Yes ☐ No

**Provide name, date and location of most recent documentation:**

Weschenfelder Feedlot Office, 2013.

**If your answer to any of the above question is no, provide explanation:**

**Section E – Land Application**

Will manure be land applied to land either owned, rented, or leased by the owner or operator of the facility?

- ☒ Yes If yes, then the information requested in Section E must be provided.  
☐ No If no, then provide an explanation of how animal waste at this facility are managed.

spread on fields as needed after harvest of crops.

**Photos and/or Maps**

Attach an aerial photograph or map of the site where manure is to be applied. (Use multiple photos/maps if necessary to show required details.) The photo(s)/map(s) must be printed on no larger than an 11"X 17" piece of paper, and must clearly identify the following items:

- Individual field boundaries for all planned land application areas
- A name, number, letter or other means of identifying each individual land application field
- The location of any downgradient surface waters.
- The location of any downgradient open tile line intake structures
- The location of any downgradient sinkholes
- The location of any downgradient agricultural well heads
- The location of all conduits to surface waters
- The specific manure/waste handling or nutrient management restrictions associated with each land application field
- The soil type(s) present and their locations within the individual land application field(s)
- The location of buffers and setbacks around state surface waters, well heads, etc.

**Land Application Equipment Calibration**

Describe the type of equipment used to land apply wastes and the calibration procedures:

trucks with spreader boxes mounted on them. MSU extension service and DEQ circular 9

**Manure Sampling and Analysis Procedures**

A representative manure sample will be analyzed a minimum of once annually for Total Nitrogen, and Total Phosphorus. Analysis results will be reported in lbs/ton or lbs/1,000 gal. Results of these analyses will be used in determining rates for manure, litter, and process wastewater.

Manure Sample collection will occur according to ARM 17.30.1334

Other (describe)

**Soil Sampling and Analysis Procedures**

Representative soil (composite) samples from the top 6 inches layer of soil for each field where manure will be applied must be analyzed for phosphorus content at least once every three years. Analyses will be conducted by a qualified laboratory, using the Olsen P test. Results will be reported in parts per million (ppm) and will be used in determining application rates for manure, litter, and process wastewater

Soil samples collection will occur according the methods in ARM 17.30.1334

Other (describe)

**Phosphorus Risk Assessment**

The permittee shall assess the risk of phosphorus contamination of state waters. An assessment shall be conducted for each field, under the control of the operator, to which manure, litter or process wastewater will or

may be applied. If a new field is added in the future, then the permittee must submit a revised (modified) NMP. The permittee has the option of using Method A or Method B (below) to complete the assessment. Copies of all tables and calculations used to complete the assessments, as well as the results of the assessments, shall be submitted to the Department and copies shall be maintained on-site at the facility and available for Departmental review. The results of the assessments shall be used to determine the appropriate basis for land application of wastes from the facility.

### Method Used

Indicate which method will be used to determine phosphorus application:

- ☒ Method A – Representative Soil Sample  
☐ Method B – Phosphorus Index

### Method A – Representative Soil Sample

- Obtain one or more representative soil sample(s) from the field per 17.30.1334
- Have the sample analyzed for Phosphorus by a qualified lab. The “Olsen P test” must be used for the analysis, and the result must be reported in parts per million (ppm)
- Using the results of the Olsen P test, determine application basis according to the Table below.

### Soil Test

Olsen P Soil Test Results (ppm)	Application Basis
<25.0	Nitrogen Needs of Crop
25.1 - 100.0	Phosphorus Needs of Crop
100.0 – 150.0	Phosphorus Needs up to Crop Removal Rate
>150.0	No Application allowed

### Method B – Phosphorus Index

- Complete a phosphorus Index according to the crop grown on each field. Complete table in Appendix A to calculate phosphorus index. For information on filling out specific sections in Appendix A, please refer to the method as described in Natural Resource Conservation Service (NRCS), Agronomy Technical Note MT-77 (rev3), January 2006.
- Using the calculated Total Phosphorus Index Value, assign the overall site/field vulnerability to phosphorus loss according to the table below.

### Total Phosphorus

Total Phosphorus Index Value	Site Vulnerability to Phosphorus Loss
<11	Low
11-21	Medium
22-43	High
>43	Very High

- Using the calculated Site Vulnerability to Phosphorus Loss, determine the appropriate application basis according to the table below.

Site Vulnerability to Phosphorus Loss	Application Basis
Low	Nitrogen Needs
Medium	Nitrogen Needs
High	Phosphorus Need Up to Crop Removal
Very High	Phosphorus Crop Removal or No Application

The applicant has 2 ways in which to report how manure or process wastewater application rates can be reported to DEQ.

**1. Linear Approach.** Expresses rates of application as pounds of nitrogen and phosphorus. CAFOs selecting the linear approach to address rates of application must include in the NMP submitted to the permitting authority the following information for each crop, field, and year covered by the NMP, which will be used by the permitting authority to establish site-specific permit terms:

- The maximum application rate (pounds/acre/year of nitrogen and phosphorus) from manure, litter, and process wastewater.
- The outcome of the field-specific assessment of the potential for nitrogen and phosphorus transport from each field. [If a state does not have an N transport risk assessment, the NMP must document any basis for assuming that nitrogen will be fully used by crops.] The CAFO must specify any conservation practices used in calculating the risk rating.
- The crops to be planted or any other uses of a field such as pasture or fallow fields.
- The realistic annual yield goal for each crop or use identified for each field.
- The nitrogen and phosphorus recommendations from in ARM 17.30.1334 (technical standard) for each crop or use identified for each field.
- Credits for all residual nitrogen in each field that will be plant-available.
- Consideration of multi-year phosphorus application. For any field where nutrients are applied at a rate based on the crop phosphorus requirement, the NMP must account for single-year nutrient applications that supply more than the crop's annual phosphorus requirement.
- All other additions of plant available nitrogen and phosphorus (i.e., from sources other than manure, litter, or process wastewater or credits for residual nitrogen).
- The form and source of manure, litter, and process wastewater to be land-applied.
- The timing and method of land application. The NMP also must include storage capacities needed to ensure adequate storage that accommodates the timing indicated.
- The methodology that will be used to account for the amount of nitrogen and phosphorus in the manure, litter, and wastewater to be applied.
- Any other factors necessary to determine the maximum application rate identified in accordance with this Linear Approach.

**2. Narrative Rate Approach.** Expresses a narrative rate of application that results in the amount, in tons or gallons, of manure, litter, and process wastewater to be land applied. CAFOs selecting the narrative rate approach to address rates of application must include in the NMP submitted to the permitting authority the following information for each crop, field, and year covered by the NMP, which will be used by the permitting authority to establish site-specific permit terms:

- The maximum amounts of nitrogen and phosphorus that will be derived from all sources of nutrients (pounds/acre for each crop and field).
- The outcome of the field-specific assessment of the potential for nitrogen and phosphorus transport from each field. The CAFO must specify any conservation practices used in calculating the risk rating.
- The crops to be planted in each field or any other uses of a field such as pasture or fallow fields, including alternative crops if applicable. Any alternative crops included in the NMP must be listed by field, in addition to the crops identified in the planned crop rotation for that field.
- The realistic annual yield goal for each crop or use identified for each field for each year, including any alternative crops identified.
- The nitrogen and phosphorus recommendations from *[the permitting authority to specify acceptable sources]* for each crop or use identified for each field, including any alternative crops identified.
- The methodology (including formulas, sources of data, protocols for making determination, etc.) and actual data that will be used to account for: (1) the results of soil tests required by Parts II.A.4.b and III.A.3.g of this

permit, (2) credits for all nitrogen in the field that will be plant- available, (3) the amount of nitrogen and phosphorus in the manure, litter, and process wastewater to be applied, (4) consideration of multi-year phosphorus application (for any field where nutrients are applied at a rate based on the crop phosphorus requirement, the methodology must account for single-year nutrient applications that supply more than the crop's annual phosphorus requirement), (5) all other additions of plant available nitrogen and phosphorus to the field (i.e., from sources other than manure, litter, or process wastewater or credits for residual nitrogen), (6) timing and method of land application, and (7) volatilization of nitrogen and mineralization of organic nitrogen.

- Any other factors necessary to determine the amounts of nitrogen and phosphorus to be applied in accordance with the Narrative Rate Approach.

- NMPs using the Narrative Rate Approach must also include the following projections, which will not be used by the permitting authority in establishing site-specific permit terms:

- i. Planned crop rotations for each field for the period of permit coverage.
- ii. Projected amount of manure, litter, or process wastewater to be applied.
- iii. Projected credits for all nitrogen in the field that will be plant-available.
- iv. Consideration of multi-year phosphorus application.
- v. Accounting for other additions of plant-available nitrogen and phosphorus to the field.
- vi. The predicted form, source, and method of application of manure, litter, and process wastewater for each crop

- If the receiving water is on the 303(d) list for nutrients then the narrative rate approach must be used.

- a. For the Linear Approach the permittee will complete the Nutrient Budget Worksheet, below, for the next 5 years to which manure or process waste water is or may be applied. A copy of each Nutrient Budget Worksheet will be maintained on site, and a copy will be submitted to the Department.



## Nutrient Budget Worksheet

Field identification: #1 cove ditch Year: 2013

Crop: CORN SILAGE

Expected Crop Yield: 32 TONS

Phosphorus index results or Phosphorus application from soil test: 27 PPM

Method of Application: NO MANURE SPREAD

When will application occur: N/A

Nutrient Budget			Nitrogen-based Application	Phosphorus-based Application	Source of information
1		Crop Nutrient Needs, lbs/acre	310 UNITS	99 UNITS	crop removal
2	(-)	Credits from previous legume crops, lbs/ac	25 units	(from organic	matter)
3	(-)	Residuals from past manure production lbs/acre	32 units	0	
4	(-)	Nutrients supplied by commercial fertilizer and Biosolids, lbs/acre	0	0	
5	(-)	Nutrients supplied in irrigation water, lbs/acre	0	0	
6		= Additional Nutrients Needed, lbs/acre	253 units		
7		Total Nitrogen and Phosphorus in manure, lbs/ton or lbs/1000 gal (from manure test)	N/A	N/A	
8	(x)	Nutrient Availability factor, for Phosphorus based application use 1.0	N/A		
9		= Available Nutrients in Manure, lbs/ton or lbs/1000 gal	N/A no manure spread		
10		Additional Nutrients needed, lbs/acre (calculated above)	253 units		
11	(/)	Available Nutrients in Manure, lbs/ton or lbs/1000 gal (calculated above)	N/A	N/A	
12		= Manure Application Rate, tons/acre or 1000 gal/acre	No Manure Spread		

Comments:

Soil Type; Medium to Heavy Sand

# Western Laboratories, Inc.

211 Highway 95 • P.O. Box 1020 • Parma, ID 83660  
800-658-3858 • FAX 208-722-6550  
<http://www.westernlaboratories.com>

Dealer: 1-136 Barry M  
Reported: 4-12-2011  
Test #: 1  
Grower: WesternFulter Feedlot  
Field ID: Cove Ditch

Site 1

Lab #:  
14057

## AGRICULTURAL SOIL REPORT

ELEMENT	ANSWER	INTERP	SHOULD BE	ELEMENT	ANSWER	INTERP	SHOULD BE
pH-Soil	8.4	Moderately Basic		Potassium-ppm	178	Low	300 +
pH-SMP				Potassium Bicarb	162	Low	250 +
pH-CaCl	8.0			Sulfate-ppm	18	Low	20 +
Soluble Salts	0.20	Normal	< 1.5	Calcium-ppm	3791	High	1,800 +
% Lime	M	3.1 to 5.5 % lime		Magnesium-ppm	284	Adequate	250 +
% Organic Matter	1.22	Very Low		Sodium-ppm	19	OK	< 225
Nitrates-ppm	8	Low	10 - 35	Zinc-ppm	1.7	Adequate	1.0 - 3.0
Ammonium-ppm	5	Low	5 +	Copper-ppm	1.0	Adequate	0.8 - 2.5
Phosphorus-ppm	27	Adequate	25 - 40	Manganese-ppm	5	Low	6 - 30
Phos-ppm-Bray			50 - 100	Iron-ppm	6	Very Low	7 +
				Boron-ppm	0.9	Adequate	0.7 - 1.5

Texture	Silt Loam		P INDEX			Fertilizer Suggestions in Pounds per Acre for the whole season		
Cation Exchange Capacity - CEC	18		100			Crop	Corn Silage	Corn Silage
Percent Base Saturation	121					Yield Goal	30 Tons	32 Tons
BASES	IDEAL	YOURS		NO3 ppm	NH4 ppm	Past Crop	Corn Silage	
Calcium-% of CEC	65-80	105	1 Ft	8	5	Acres	30	
Magnesium-% of CEC	10-20	13	2 Ft			Nitrogen	201	217
Potassium-% of CEC	2-6	2.5	3 Ft			Phosphate	10	24
Sodium-% of CEC	< 5	.5	Total N PPM		13	Add Phos for P INDEX	76	
Hydrogen-% of CEC	< 15		Lbs N / Acre		39	Potash	141	162
Ratio	Ideal	Yours	Evaluation	Recommendations				
Ca:Mg	6-20:1	13:1	OK					
Ca:P pH >7	100:1	140:1	High	Watch P				
Ca:P pH <7	40:1	:1						
P:Zn	15:1	16:1	High	Watch Zn				

Methods: [www.westernlaboratories.com/methods.htm](http://www.westernlaboratories.com/methods.htm)

Remarks:

40# Phosphate as starter if soil temps < 50F at planting

Split apply Nitrogen: Tissue and soil test in-season gives the best results

Lime		
Dolomite		
Magnesium		
Zinc	2	3
Manganese		1
Copper		
Boron	1	1

"Always practice the laws of Agronomy."

John P. Taberna, Soil Scientist

Park City . t

**Nutrient Budget Worksheet**

Field identification: #2 Fox field Year: 2013

Crop: CORN SILAGE

Expected Crop Yield: 32 TONS

Phosphorus index results or Phosphorus application from soil test: 39 PPM

Method of Application: NO MANURE SPREAD

When will application occur: N/A

Nutrient Budget			Nitrogen-based Application	Phosphorus-based Application	Source of information
1		Crop Nutrient Needs, lbs/acre	310 UNITS	99 UNITS	crop removal
2	(-)	Credits from previous legume crops, lbs/ac	25 units	(from organic	matter)
3	(-)	Residuals from past manure production lbs/acre	120 units	0	
4	(-)	Nutrients supplied by commercial fertilizer and Biosolids, lbs/acre	165 units	0	
5	(-)	Nutrients supplied in irrigation water, lbs/acre	0	0	
6		= Additional Nutrients Needed, lbs/acre	165 units		
7		Total Nitrogen and Phosphorus in manure, lbs/ton or lbs/1000 gal (from manure test)	N/A	N/A	
8	(x)	Nutrient Availability factor, for Phosphorus based application use 1.0	N/A		
9		= Available Nutrients in Manure, lbs/ton or lbs/1000 gal	N/A no manure spread		
10		Additional Nutrients needed, lbs/acre (calculated above)	165 units		
11	(/)	Available Nutrients in Manure, lbs/ton or lbs/1000 gal (calculated above)	N/A	N/A	
12		= Manure Application Rate, tons/acre or 1000 gal/acre	No Manure Spread		

Comments:

soil Type: medium To Heavy Clay

# Western Laboratories, Inc.

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800-658-3858 • FAX 208-722-6550

<http://www.westernlaboratories.com>

Dealer: 1-130

Barry M

Reported: 4-12-2011

Test #: 1

Grower: WesternFulter Feedlot

Field ID: Fox North South Rows

PAP Accredited



Lab #:

14059

## AGRICULTURAL SOIL REPORT

ELEMENT	ANSWER	INTERP	SHOULD BE	ELEMENT	ANSWER	INTERP	SHOULD BE
pH-Soil	8.0	Moderately Basic		Potassium-ppm	256	Low	300 +
pH-SMP				Potassium Bicarb	213	Low	250 +
pH-CaCl	7.6			Sulfate-ppm	55	Adequate	20 +
Soluble Salts	0.71	Normal	< 1.5	Calcium-ppm	4423	High	1,800 +
% Lime	M	3.1 to 5.5 % lime		Magnesium-ppm	653	Very High	250 +
% Organic Matter	2.16	Low		Sodium-ppm	47	OK	< 225
Nitrates-ppm	30	Adequate	10 - 35	Zinc-ppm	2.0	Adequate	1.0 - 3.0
Ammonium-ppm	6	Adequate	5 +	Copper-ppm	1.4	Adequate	0.8 - 2.5
Phosphorus-ppm	39	Adequate	25 - 40	Manganese-ppm	5	Low	6 - 30
Phos-ppm-Bray			50 - 100	Iron-ppm	12	Adequate	7 +
				Boron-ppm	1.9	High	0.7 - 1.5

Texture	Silt Loam		P INDEX			Fertilizer Suggestions in Pounds per Acre for the whole season		
Cation Exchange Capacity - CEC	20		100			Crop	Corn Silage	Corn Silage
Percent Base Saturation	142					Yield Goal	30 Tons	32 Tons
BASES	IDEAL	YOURS		NO3 ppm	NH4 ppm	Past Crop	Corn Silage	
Calcium-% of CEC	65-80	110	1 Ft	30	6	Acres	76	
Magnesium-% of CEC	10-20	27	2 Ft			Nitrogen	132	148
Potassium-% of CEC	2-6	3.3	3 Ft			Phosphate		
Sodium-% of CEC	< 5	1	Total N PPM		36	Add Phos for P INDEX	94	
Hydrogen-% of CEC	< 15		Lbs N / Acre		108	Potash	63	84
Ratio	Ideal	Yours	Evaluation	Recommendations		Sulfates		
Ca:Mg	6-20:1	7:1	OK			Elemental Sulfur	282	
Ca:P pH >7	100:1	113:1	High	Watch P		Gypsum		
Ca:P pH <7	40:1	:1				Lime		
P:Zn	15:1	20:1	High	Watch Zn		Dolomite		
						Magnesium		
						Zinc	1	2
						Manganese		1
						Copper		
						Boron		

Methods: [www.westernlaboratories.com/methods.htm](http://www.westernlaboratories.com/methods.htm)

Remarks:

Add 40# Phosphate as starter if soil temps < 50F at planting

Split apply Nitrogen. Tissue and soil test in-season gives the best results

*"Always practice the laws of Agronomy."*

*John P. Taberna, Soil Scientist*

**Section F - CERTIFICATION**

**Permittee Information:** This form must be completed, signed, and certified as follows:

- For a corporation, by a principal officer of at least the level of vice president;
- For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
- For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official.

**All Permittees Must Complete the Following Certification:**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information; including the possibility of fine and imprisonment for knowing violations. [75-5-633, MCA]

**A. Name (Type or Print)**

Dan Weschenfelder

DAN WESCHENFELDER

**B. Title (Type or Print)**

OWNER/MANAGER

CO OWNER

**C. Phone No.**

406-698-8502

**D. Signature**

Dan Weschenfelder

**E. Date Signed**

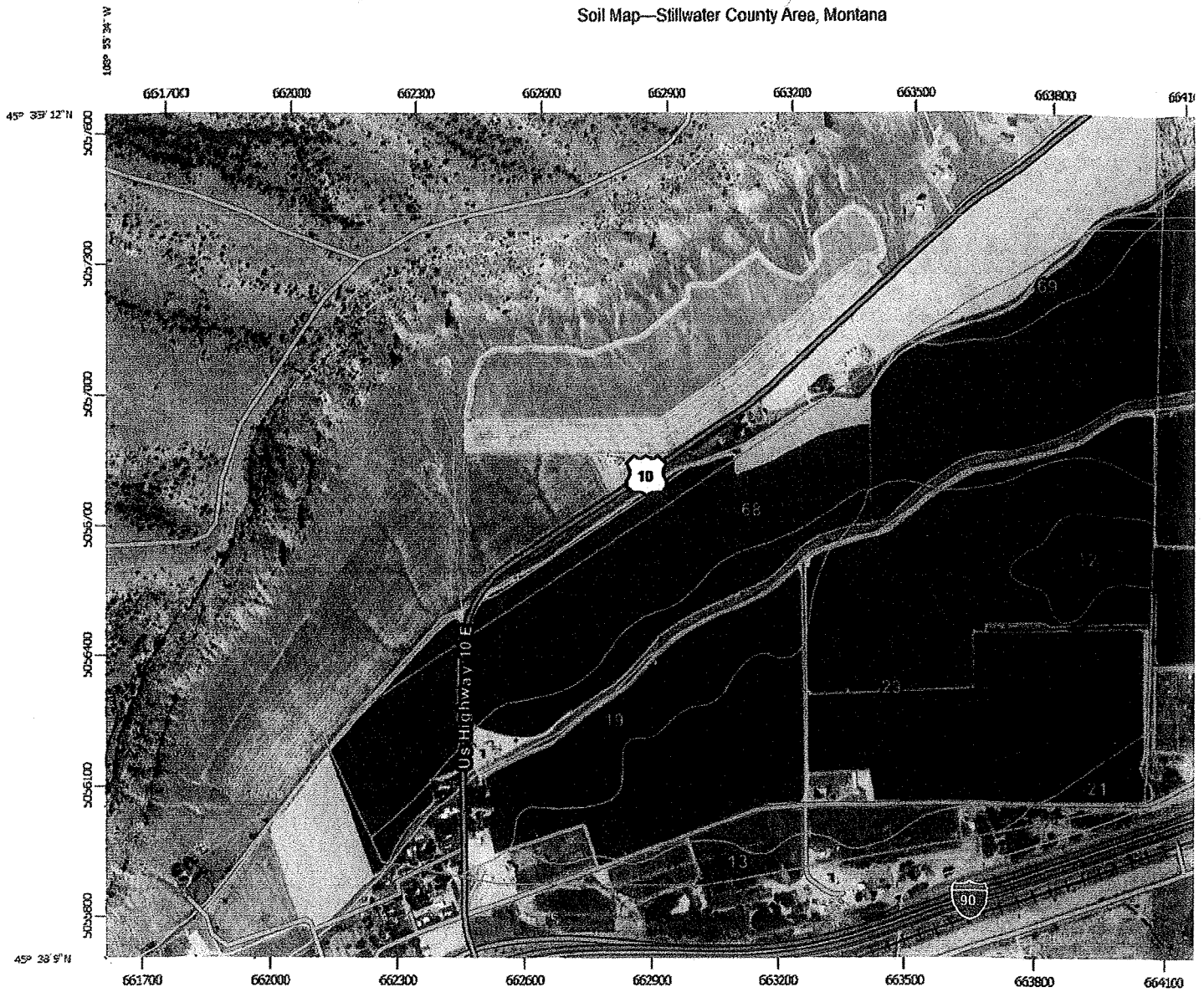
12-5-13

The Department will not process this form until all of the requested information is supplied, and the appropriate fees are paid. Return this form and the applicable fee to:

Department of Environmental Quality  
Water Protection Bureau  
PO Box 200901  
Helena, MT 59620-0901  
(406) 444-3080

RECEIVED  
DEC 10 2013  
DEQWA  
PERMITTING & COMPLIANCE DIV.

Soil Map—Stillwater County Area, Montana



Map Scale: 1:13,700 if printed on A landscape (11" x 8.5") sheet.

0 200 400 600 800 1000 1200 Meters

0 500 1000 2000 3000 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 12N WGS84



**Natural Resources  
Conservation Service**


**Web Soil Survey  
National Cooperative Soil Survey**

## Map Unit Legend

Stillwater County Area, Montana (MT655)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
12	Attewan loam, seeped, 0 to 4 percent slopes	12.7	2.9%
13	Attewan-Beaverell gravelly loams, 0 to 4 percent slopes	20.0	4.6%
19	Glendive fine sandy loam, 0 to 4 percent slopes	70.9	16.2%
21	Grail clay loam, 0 to 4 percent slopes	6.7	1.5%
29	Kobar clay loam, 0 to 4 percent slopes	176.4	40.2%
68	Yamac loam, 2 to 4 percent slopes	138.0	31.5%
69	Yamac loam, 4 to 8 percent slopes	13.7	3.1%
<b>Totals for Area of Interest</b>		<b>438.5</b>	<b>100.0%</b>


## MAP LEGEND

## Area of Interest (AOI)

 Area of Interest (AOI)


## Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

## Special Point Features

 Blowout


 Borrow Pit


 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water


 Perennial Water

 Rock Outcrop


 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features


## Water Features

 Streams and Canals


## Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

## Background

 Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI

Please rely on the bar scale on each map for measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL: <http://websoilsurvey.sc.egov.usda.gov>

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on a map projection, which preserves direction and distance and area. A projection that preserves area (Albers equal-area conic projection), should be used for calculations of distance or area are required.

This product is generated from the USDA National Cooperative Soil Survey data as of the version date(s) listed below.

Soil Survey Area: Stillwater County Area

Survey Area Data: Version 7, Dec 5, 2011

Soil map units are labeled (as space allows) with the soil map unit name or larger.

Date(s) aerial images were photographed: 2011

The orthophoto or other base map on which the soil map was compiled and digitized probably differs from the imagery displayed on these maps. As a result, some soil map unit boundaries may be evident.



Natural Resources  
Conservation Service

Web Soil Survey  
National Cooperative Soil Survey